

Application No. 10/811537
Page 2

Amendment
Attorney Docket No. B94.2R-11495-US01

Amendments To The Claims:

1) (Currently amended) A muzzle brake comprising:
a body having a first end, a second end, an internal plenum space and a plurality of vent slots, each vent slot comprising a first planar side and a second planar side, each vent slot having a planar axis, each vent slot having an aperture in communication with the internal plenum space, the internal plenum space comprising an elongate projectile path plenum having a central longitudinal axis and a plurality of enlarged serial plenums; and
a tubular cover arranged to overlay at least a portion of the body, the tubular cover overlaying a portion of each vent slot, the tubular cover having at least one side port oriented over a plurality of vent slots in communication with at least one vent slot.

2) (Original) The muzzle brake of claim 1, wherein a central longitudinal axis of each enlarged serial plenum lies along the central longitudinal axis of the elongate projectile path plenum.

3) (Original) The muzzle brake of claim 1, wherein the aperture of each vent slot is in communication with an enlarged serial plenum.

4) (Previously presented) The muzzle brake of claim 1, wherein each of said enlarged serial plenums has a constant diameter along its length.

5) (Previously presented) The muzzle brake of claim 1, wherein each vent slot is oriented at a non-zero orientation angle to the central longitudinal axis of the elongate projectile path plenum, and wherein the orientation angle of a vent slot increases from the muzzle brake first end to the muzzle brake second end.

6) (Previously presented) The muzzle brake of claim 1, wherein each vent slot is oriented at a non-zero orientation angle to the central longitudinal axis of the elongate projectile path plenum, and wherein the orientation angle of a vent slot decreases from the muzzle brake first end to the muzzle brake second end.

7) (Currently amended) The muzzle brake of claim 17, wherein a horizontal depth dimension of each vent slot increases from the muzzle brake first end to the muzzle brake second end.

8) (Original) The muzzle brake of claim 1, wherein the tubular cover is fixedly attached to the body.

Application No. 10/811537
Page 3

Amendment
Attorney Docket No. B94.2R-11495-US01

9) (Original) The muzzle brake of claim 1, wherein the side port in the tubular cover increases in size from a first end to a second end.

10) (Currently amended) The muzzle brake of claim 1, wherein ~~at least one vent slot is two vent slots are provided for each enlarged serial plenum.~~

11) (Previously presented) The muzzle brake of claim 1, wherein the area of each vent slot aperture in communication with an enlarged serial plenum increases from the muzzle brake first end to the muzzle brake second end.

12) (Original) The muzzle brake of claim 1, further comprising a first group of vent slots and a second group of vent slots, each group of vent slots having at least one vent slot in communication with each enlarged serial plenum.

13) (Original) The muzzle brake of claim 12, wherein a vent slot of the first group of vent slots that is in communication with a first enlarged serial plenum comprises a mirror image of a vent slot of the second group of vent slots that is in communication with the first enlarged serial plenum.

14) (Currently amended) The muzzle brake of claim 12, wherein the cover comprises a first side port and a second side port, the first side port in communication with ~~at least one oriented over a portion of each~~ vent slot of the first group of vent slots, the second side port in communication with ~~at least one oriented over a portion of each~~ vent slot of the second group of vent slots.

15) (Previously presented) A muzzle brake comprising:
a body having a first end, a second end, an internal plenum space and a plurality of vent slots, each vent slot having an aperture in communication with the internal plenum space, the internal plenum space comprising an elongate projectile path plenum having a central longitudinal axis and a plurality of enlarged serial plenums; and
a tubular cover arranged to overlay at least a portion of the body, the tubular cover having at least one side port in communication with at least one vent slot;
wherein at least one vent slot further comprises a first side and a second side, the first side being nonparallel to the second side.

16) (Previously presented) The muzzle brake of claim 17, wherein each vent slot passes through the entire height dimension of the body in the area of the vent slot.

Application No. 10/811537

Page 4

Amendment
Attorney Docket No. B94.2R-11495-US01

17) (Currently amended) A muzzle brake comprising:

a body having a central longitudinal axis, a first end having an entrance aperture, a second end having an exit aperture, an internal plenum space and a plurality of vertically oriented vent slots, each vent slot raked toward said first end, each vent slot having a planar ~~axis side~~ oriented at an acute orientation angle with respect to the central longitudinal axis of the body, each vent slot having an aperture in communication with the internal plenum space; and

a tubular cover arranged to overlay at least a portion of the body, the tubular cover overlaying a portion of each vent slot, the tubular cover having at least one side port oriented over a plurality of vent slots in communication with at least one vent slot.

18) (Currently amended) The muzzle brake of claim 17, wherein the orientation angle of each vent slot planar ~~axis side~~ increases from the muzzle brake first end to the muzzle brake second end.

19) (Currently amended) The muzzle brake of claim 17, wherein the orientation angle of each vent slot planar ~~axis side~~ decreases from the muzzle brake first end to the muzzle brake second end.

20) (Original) The muzzle brake of claim 17, wherein the area of each vent slot aperture in communication with the plenum space increases from the muzzle brake first end to the muzzle brake second end.

21) (Currently amended) A muzzle brake comprising:

a body comprising an internal plenum space, an entrance aperture, an exit aperture, a first group of vent slots and a second group of vent slots, each vent slot having opposed first and second sides defined by the body, each vent slot having an aperture in communication with the internal plenum space; and

a tubular cover comprising a wall portion, a first side port and a second side port; wherein the tubular cover is arranged to overlay at least a portion of the body such that at least a portion of each vent slot is covered by the wall portion of the tubular cover, the wall portion of the tubular cover abuts an area of the body located between vent slots, at least a portion of each vent slot of the first group of vent slots is in communication with the first side port of the tubular cover, and at least a portion of each vent slot of the second group of vent slots is in communication with the second side port of the tubular cover.

Application No. 10/811537
Page 5

Amendment
Attorney Docket No. B94.2R-11495-US01

22. (Currently amended) The muzzle brake of claim 1, the vent slots comprising a plurality of first vent slots and a plurality of second vent slots, the tubular cover further comprising a first elongate obstruction portion, a second elongate obstruction portion, a first elongate side port and a second elongate side port;

wherein the first elongate obstruction portion overlays a portion of each first vent slot, the second elongate obstruction portion overlays a portion of each second vent slot, the first elongate side port is oriented over a portion of each first vent slot and the second elongate side port is oriented over a portion of each second vent slot the planar axis of a vent slot includes curvature.